Test Beforehand, Don't Guess

Optimal plant growth requires specific soil pH and nutrient levels. These requirements vary with soil type, nutrient source, crop and weather. Even so, meeting known soil requirements can be pointless if populations of plant-parasitic nematodes are above threshold levels.

Given the expense of agricultural inputs, there is no reason to waste money by guessing. RAs can suggest proper tests and sampling strategies. Clients can be confident that they are putting out just the right amount of nutrients and applying nematicides only when necessary, thereby protecting the bottom line as well as the environment.

Monitor Plant Nutrition Regularly

Throughout the growing season, RAs help clients monitor the nutritional status of crops. They can suggest routine testing programs to prevent deficiencies, optimize yields and accurately time harvest. They often troubleshoot to find a reason for nutrient problems, whether it be soil pH, type of fertilizer material, irrigation water quality, nematodes or uneven application.

Be Mindful of the Environment

In recent years, RAs have become increasingly involved in nutrient management issues from an environmental standpoint. They help write nutrient management plans associated with animal and municipal waste application, evaluate receiver sprayfields for compliance with agronomic requirements, and have been instrumental in developing realistic

yield expectations for field crops. For best management nutrient practices, remember to consult your regional agronomist.

For additional information, contact

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Agronomic Division

Field Services

Providing Advice on Plant Nutrient Issues & Nematode Management



N.C. Department of Agriculture and Consumer Services

Steve Troxler, Commissioner

NCDA&CS Regional Agronomists

The goal of the Field Services Section is to promote agronomically sound nutrient use and nematode management, thereby optimizing crop production and fostering agricultural sustainability. Thirteen regional agronomists (RAs) work toward this end by advocating proper use of agronomic testing services (Figure 1). Agronomic Division tests include soil testing, nematode assay, plant tissue analysis, waste analysis and solution analysis.

RAs are crop advisors within the state department of agriculture. Unlike Cooperative Extension, which covers a broad agricultural spectrum, RAs focus on a narrower, welldefined set of issues. Their mandate is to provide guidance on crop nutrient and/or plant-parasitic nematode problems, specifically with regard to the use of Agronomic Division laboratory services.

North Carolina is unique in having its agronomic testing laboratories housed within the state department of agriculture instead of the state university. It is also one of very few states to offer five types of tests for minimal fees, if any. RAs not only provide education and assistance with regard to the use of these services but also bring valuable feedback about field situations to laboratory and professional staff.

RAs, however, do much more than provide advice to farmers. Their services are vital to nursery professionals, landscapers, park and golf course superintendents, municipal waste facilities, agricultural consultants, soil conservationists and water quality specialists, to name a few. RAs are a highly experienced source of information on North Carolina soil and crop nutrient issues.

RAs specialize in lime needs, crop fertilization; soil amendment; timing of harvest; source water or nutrient solution evaluation; compost generation; management of plant-parasitic nematodes; waste water, sludge and litter application; and yield optimization. They make site visits, assess problem situations, suggest suitable agronomic tests and demonstrate proper sampling techniques. If necessary, they review test results with clients to make sure any recommended management strategies are clear and straightforward.

